

AMENDMENTS TO THE CLAIMS

Please cancel Claims 2, 13, and 14 without prejudice, as indicated below.

Please amend Claims 1, 6, 7, and 12, as indicated below.

Please add new Claims 15-21.

A complete listing of all claims is presented below with insertions underlined (e.g., insertion), and deletions struckthrough or in double brackets (e.g., ~~deletion~~ or [[deletion]]).

1. (Currently Amended) A containment plenum adapted to deliver laser light to an interaction region of an inhabitable structure to remove material from the structure, the containment plenum comprising:

a plenum housing adapted to be coupled to a source of laser light, wherein the plenum housing is either air-cooled or water-cooled;

a window substantially transparent to the laser light, the window mounted within the plenum housing to transmit the laser light in a downstream direction and to provide a barrier to upstream transport of particulate matter generated by interaction of the laser light and the structure;

a nozzle fluidly coupled to a source of compressed gas, the nozzle mounted downstream of the window whereby the laser light and the compressed gas are transmitted through the nozzle in the downstream direction to the interaction region of the structure; and

a resilient interface coupled to the plenum housing and adapted to resiliently contact the structure and to substantially surround the interaction region, thereby confining the material and removing the material from the interaction region.

2. (Cancelled)

3. (Original) The containment plenum of Claim 1, wherein the window is mounted in a removable assembly within the plenum housing.

4. (Original) The containment plenum of Claim 1, wherein the window focuses the laser light.

5. (Original) The containment plenum of Claim 1, wherein the window provides a surface against which the compressed gas exerts pressure.

6. (Currently Amended) ~~The containment plenum of Claim 1~~A containment plenum adapted to deliver laser light to an interaction region of an inhabitable structure to remove material from the structure, the containment plenum comprising:

a plenum housing adapted to be coupled to a source of laser light;

a window substantially transparent to the laser light, the window mounted within the plenum housing to transmit the laser light in a downstream direction and to provide a barrier to upstream transport of particulate matter generated by interaction of the laser light and the structure;

a nozzle, fluidly coupled to a source of compressed gas, the nozzle mounted downstream of the window whereby the laser light and the compressed gas are transmitted through the nozzle in the downstream direction to the interaction region of the structure, wherein the nozzle comprises copper; and

a resilient interface coupled to the plenum housing and adapted to resiliently contact the structure and to substantially surround the interaction region, thereby confining the material and removing the material from the interaction region.

7. (Currently Amended) ~~The containment plenum of Claim 1~~A containment plenum adapted to deliver laser light to an interaction region of an inhabitable structure to remove material from the structure, the containment plenum comprising:

a plenum housing adapted to be coupled to a source of laser light;

a window substantially transparent to the laser light, the window mounted within the plenum housing to transmit the laser light in a downstream direction and to provide a barrier to upstream transport of particulate matter generated by interaction of the laser light and the structure;

a nozzle fluidly coupled to a source of compressed gas, the nozzle mounted downstream of the window whereby the laser light and the compressed gas are transmitted through the nozzle in the downstream direction to the interaction region of the structure, wherein the nozzle is either air-cooled or water-cooled; and

a resilient interface coupled to the plenum housing and adapted to resiliently contact the structure and to substantially surround the interaction region, thereby confining the material and removing the material from the interaction region.

8. (Original) The containment plenum of Claim 1, wherein the resilient interface facilitates blocking sound from escaping outside the containment plenum.

9. (Original) The containment plenum of Claim 1, wherein the resilient interface facilitates blocking the laser light from escaping outside the containment plenum.

10. (Original) The containment plenum of Claim 9, wherein the containment plenum further comprises an extraction port in fluid communication with the interaction region, the extraction port adapted to extract the material from the containment plenum.

11. (Original) The containment plenum of Claim 10, wherein the extraction port is fluidly coupled to a vacuum generator adapted to generate a vacuum to pull the material from the containment plenum.

12. (Currently Amended) ~~The containment plenum of Claim 1~~ A containment plenum adapted to deliver laser light to an interaction region of an inhabitable structure to remove material from the structure, the containment plenum comprising:

a plenum housing adapted to be coupled to a source of laser light;

a window substantially transparent to the laser light, the window mounted within the plenum housing to transmit the laser light in a downstream direction and to provide a barrier to upstream transport of particulate matter generated by interaction of the laser light and the structure;

a nozzle fluidly coupled to a source of compressed gas, the nozzle mounted downstream of the window whereby the laser light and the compressed gas are transmitted through the nozzle in the downstream direction to the interaction region of the structure; and

a resilient interface coupled to the plenum housing and adapted to resiliently contact the structure and to substantially surround the interaction region, thereby confining the material and removing the material from the interaction region, wherein the resilient interface comprises a wire brush.

13. (Cancelled)

14. (Cancelled)

15. (New) The containment plenum of Claim 6, wherein the window is mounted in a removable assembly within the plenum housing.

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16. (New) The containment plenum of Claim 6, wherein the window focuses the laser light.

17. (New) The containment plenum of Claim 6, wherein the window provides a surface against which the compressed gas exerts pressure.

18. (New) The containment plenum of Claim 6, wherein the resilient interface facilitates blocking sound from escaping outside the containment plenum.

19. (New) The containment plenum of Claim 6, wherein the resilient interface facilitates blocking the laser light from escaping outside the containment plenum.

20. (New) The containment plenum of Claim 19, wherein the containment plenum further comprises an extraction port in fluid communication with the interaction region, the extraction port adapted to extract the material from the containment plenum.

21. (New) The containment plenum of Claim 20, wherein the extraction port is fluidly coupled to a vacuum generator adapted to generate a vacuum to pull the material from the containment plenum.